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## **CLAIMS**

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## What is claimed is:

1. A polypeptide consisting essentially of a first amino acid sequence comprising a comprising a transduction sequence of hPER1 linked to a second amino acid sequence comprising a cytotoxic T lymphocyte epitope, wherein the transduction sequence is RRHHRRSKAKRSR.

- 2. The polypeptide of claim 1 wherein a linker sequence is inserted between the first and second amino acid sequences.
- The polypeptide of claim 2 wherein the linker sequence naturally occurs with the second amino acid sequence.
  - 4. The polypeptide of claim 2 wherein the linker sequence does not naturally occur with the second amino acid sequence.
  - 5. The polypeptide of claim 1 wherein the second amino acid sequence is derived from a tumor antigen, an antigen of an infectious agent, or an autoimmune antigen.
  - 6. A composition comprising a polypeptide of any one of claims 1-5 in a pharmaceutically acceptable carrier.
  - 7. A method for immunizing a host comprising administering to the host a composition of claim 6.
- 20 8. A method for immunizing a host comprising admixing a polypeptide or composition of any of claims 1-7 with dendritic cells to generate peptide-loaded dendritic cells and administering the peptide-loaded dendritic cells to the host.
- 9. An isolated recombinant DNA molecule comprising a first DNA sequence encoding a cytotoxic T lymphocyte epitope joined to a second DNA sequence encoding a transduction sequence of hPER1, wherein the transduction sequence is RRHHRRSKAKRSR.
  - 10. The DNA molecule of claim 21 wherein a DNA sequence encoding a linker amino acid sequence is inserted between the first and second amino acid sequences.
  - 11. The DNA molecule of claim 22 wherein the linker amino acid sequence naturally occurs with the second amino acid sequence.
  - 12. The DNA molecule of claim 11 wherein the linker sequence does not naturally occur with the second amino acid sequence.

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13. The DNA molecule of any one of claims 9-12 wherein the first amino acid sequence is derived from a tumor antigen, an antigen of an infectious agent, or an autoimmune antigen.

14. A composition comprising a recombinant DNA molecule of any one of claims 9-14.

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- 15. A method for immunizing a host comprising administering a polypeptide consisting essentially of a first amino acid sequence comprising a polypeptide, recombinant DNA or composition of any one of claims 1-14 administered by a subcutaneous, intradermal, or intranasal route.
- 16. The method of claim 16 wherein the cytotoxic T lymphocyte epitope is derived from a tumor antigen, an infectious agent, or an autoimmune antigen.
  - 17. A method for immunizing a host comprising administering by a subcutaneous, intradermal, or intranasal route a targeted immunogen consisting essentially a polypeptide, recombinant DNA or composition of any one of claims 1-14.
- 18. A method for immunizing a host comprising administering by a subcutaneous, intradermal, or intranasal route a targeted immunogen consisting essentially of a polypeptide comprising a comprising a transduction sequence of hPER1 linked to a second amino acid sequence comprising a cytotoxic T lymphocyte epitope.
- 20 19. A method for immunizing a host comprising administering by a subcutaneous, intradermal, or intranasal route a targeted immunogen consisting essentially of a recombinant DNA molecule comprising a first DNA sequence encoding a cytotoxic T lymphocyte epitope joined to a second DNA sequence encoding a transduction sequence of hPER1, recombinant DNA
- 25 20. A method for immunizing a host comprising administering by a subcutaneous, intradermal, or intranasal route a composition comprising a polypeptide of claim 18 or a recombinant DNA molecule of claim 19.
  - 21. The method of any one of claims 17-20 wherein the cytotoxic T lymphocyte epitope is derived from a turnor antigen, an infectious agent, or an autoimmune antigen.